COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled <u>SYNCHRONIZATION PULSE DETECTION CIRCUIT</u>, the specification of which was filed on <u>March 4</u>, 1999, as Application Serial No. <u>09/262,589</u>.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information I know to be material to patentability in accordance with Title 37, Code of Federal Regulations, §1.56.

I hereby appoint the following attorneys and/or agents to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Richard M. Sharkansky, Reg. No. 25,800; Eric L. Prahl, Reg. No. 32,590 and Gary A. Walpert, Reg. No. 26,098; David L. Feigenbaum, Reg. No. 30,378; Timothy A. French, Reg. No. 30,175; and John F. Hayden, Reg. No. 37,640.

Address all telephone calls to Richard M. Sharkansky at telephone number 617/542-5070.

Address all correspondence to <u>Richard M. Sharkansky</u>, Fish & Richardson P.C., 225 Franklin Street, Boston, MA 02110-2804.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full Name of Inventor: Christian Willibald Böhm
Inventor's Signature: Amorian Willibald Bol Date: 13 - April - 1939
Residence Address: Breska, Clarina, Co., Limerick, IRELAND
Citizen of: Germany
Post Office Address: Same As Above
Full Name of Inventor: Michael Patrick Daly
Inventor's Signature: Michael Patrick Daly Date: 19 - April - 1999
Residence Address: 3 Season Park, Newtownmountkennedy, Co., Wicklow, IRELAND
Citizen of: Republic of Ireland
Post Office Address: Same As Above

COMBINED DECLA_ATION AND POWER OF ATTORI ._Y CONTINUED

Full Name of Inventor: Kieran Hei	fernan		
Inventor's Signature: Kea	Kefferna	Date: 19 April	1799
Residence Address: 20 Belgard Gr	· //	•	
Citizen of: Republic of Ireland			
Post Office Address: Same As Abo	ove		

06708/015001

UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office ASSISTANT SECRETARY AND COMMISSIONER

JULY 13, 1999

FISH & RICHARDSON P.C. RICHARD M. SHARKANSKY 225 FRANKLIN STREET BOSTON, MA 02110-2804



UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY INCONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

PRECORDATION DATE: 05/03/1999

REEL/FRAME: 9936/0277

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR''S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

BOHM, CHRISTIAN WILLIBALD

DOC DATE: 04/19/1999

ASSIGNOR:

DALY, MICHAEL PATRICK

DOC DATE: 04/19/1999

ASSIGNOR:

HEFFERNAN, KIERAN

DOC DATE: 04/19/1999

ASSIGNEE:

ANALOG DEVICES, INC. ONE TECHNOLOGY WAY NORWOOD, MASSACHUSETTS 02062-9106

SERIAL NUMBER: 09262589

PATENT NUMBER:

FILING DATE: 03/04/1999

ISSUE DATE:

 No Docketing Required Reviewed By Fractice Systems

Initials FMT

Reviewed By Billing Secretary

Initials

SEDLEY PYNE, PARALEGAL ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

Substitute Form PTO-1595	12-1999 : Attorney to cker No : 09938/02001
	ent. D
Assistant Commissioner for Patents. Fie	037455
 Name of conveying party(ies): Christian Willibald Böhm, Michael Patrick Daly and Kieran Heffernan 	Analog Devices, Inc. One Technology Way Norwood, MA 02062-9106
Additional name(s) attached? ☐ Yes ■ No	4 11
 Nature of conveyance: ■ Assignment □ Merger □ Security Agreement □ Change of Name □ Other: 	Additional names/addresses attached? ☐ Yes ■ No
Execution Date: April 19, 1999	
4. Application number(s) or patent number(s): If this document is being filed with a new applicatio A. Patent Application No.(s): 09/262,589 filed 3/4/99 Additional number	n, the execution date of the application is: B. Patent No.(s): ers attached? □ Yes ■ No
5. Name/address of party to whom correspondence	Total number of applications/patents involved: 1
concerning document should be mailed: Richard M. Sharkansky Fish & Richardson P.C. 225 Franklin Street Boston, MA 02110-2804	 7. Total fee (37 CFR 3.41): \$40 ■ Enclosed □ Authorized to charge deposit account
05/11/1999 JSHABAZZ 00000055 0926258	 Deposit account number: 06-1050 If the fee above is being charged to deposit account, a duplicate copy of this cover sheet is attached. Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.
	USE THIS SPACE
VI 101001	
and the attached is the original document. Richard M. Sharkansky/Reg.#25,800	edge and pelief, the foregoing information is true and correct
Name of Person Signing Signat	ui o /
Total number of pages including	cover sheet, attachments, and document: 3
	Date of Deposit I hereby certify under 37 CFR 1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

ASSIGNMENT

For valuable consideration, we, Christian Willibald Böhm, of Limerick, Ireland; Michael Patrick Daly of Wicklow, Ireland and Kieran Heffernan of Limerick, Ireland hereby assign to Analog Devices, Inc., a Massachusetts corporation having a place of business at One Technology Way, Norwood, MA 02062-9106, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest, including, without limitation, the right to sue for past infringement, throughout the world in the inventions and improvements, which are subject of an application for United States Patent signed by us, entitled SYNCHRONIZATION PULSE DETECTION CIRCUIT, filed March 4, 1999, and assigned U.S. Serial Number 09/262,589, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

WITNESS WHEREOF, I hereto set my hand and seal at	
this 19th day of April , 1933	
Christian Willibald Böhm Christian Willibald Böhm	L.S.
CITY OF <u>limerick</u> :	
COUNTRY OF <u>Ireland</u> :	
Before me this 19th day of April , 1933, personally appeared	
Christian Williald Bol known to me to be the person whose name is subscribed to the	
foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for purposes therein contained.	the:

IN WITNESS WHEREOF, I hereto set my hand and seal at
this 194 day of April, 1999
Michael Patrick Daly L.S
Michael Patrick Daly
CITY OF Limerick:
COUNTRY OF /reland:
Before me this 19th day of April, 1999, personally appeared
Acheel Patrick Day known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the
purposes therein contained.
Dil Menn
WITNESS
WITNESS WITNESS
IN WITNESS WHEREOF, I hereto set my hand and seal at
$\frac{dris}{dris} = \frac{1911}{1911} $ day of $\frac{4pr}{1911}$, 1957
IN WITNESS WHEREOF, I hereto set my hand and seal at
Kieran Heffernan/
CITY OF Lineack:
COUNTRY OF Ireland:
Before me this $\frac{19}{19}$ day of $\frac{4}{19}$, $\frac{19}{19}$, personally appeared
day of, 19//, personally appeared
known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the
ioregoing rissignment, and would wideged and no one officer and of
purposes therein contained.
Dul Man
WITNESS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:

Christian W. Bohm et al.

GROUP NO.:

2614

SER. NO.:

09/262,589

EXAMINER:

T. Tran

FILED:

March 4, 1999

FOR:

SYNCHRONIZATION PULSE DETECTION CIRCUIT

Assistant Commissioner of Patents Washington, D.C. 20231

Sir:

TRANSMITTAL OF POWER OF ATTORNEY BY ASSIGNEE (REVOCATION OF PRIOR POWERS)

Enclosed herewith is an executed Power of Attorney by Assignee of Entire Interest (Revocation of Prior Powers), and a Change of Correspondence Address together with a Certificate Under 3.73b for the above-identified patent.

Respectfully submitted,

Matthew E. Connors

Registration No. 33,298

Samuels, Gauthier & Stevens

225 Franklin Street

Boston, Massachusetts 02110

Telephone: (617) 426-9180

Extension 112

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown-below with sufficient postage as first class mail in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Dehorah M. Coste No.

Date 2/14/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:

Bohm et al.

SERIAL NO:

09/262,589

FILED:

March 4, 1999

FOR:

SYNCHRONIZATION PULSE DETECTION CIRCUIT

NOTE: Insert name(s) of inventor(s) and title also for patent.

Assistant Commissioner of Patents Washington, D.C. 20231

POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST (REVOCATION OF PRIOR POWERS)

As assignee of record of the entire interest of the above identified

[X] application

[] patent

REVOCATION OF PRIOR POWERS OF ATTORNEY

all powers of attorney previously given are hereby revoked and

NEW POWER OF ATTORNEY

the following attorney(s) and/or agents are hereby appointed to prosecute and transact all business in the Patent and Trademark Office connected therewith.

(List name and registration number)

Maurice E. Gauthier -	20,798	William E. Hilton	-	35,192
Richard L. Stevens -	24,445	Patrick J. O'Shea	-	35,305
Matthew E. Connors -	33,298	Arlene J. Powers	-	35,985
		Steven M. Mills	-	36,610
		Anthony P. Onello, Jr.	-	38,572

Page 1 of 2

SEND CORRESPONDENCE TO:

Matthew E. Connors, Esq. Samuels, Gauthier & Stevens LLP 225 Franklin Street, Suite 3300 Boston, Massachusetts 02110

DIRECT TELEPHONE CALLS TO:

Matthew E. Connors (617) 426-9180 Extension 112

Analog Devices, Inc.

Type or print identity of assignee of entire interest

One Technology Way Norwood, MA 02062 Address

[X]	Recorded in PTO on May 3, 1999
	Reel 9936
	Frame
[]	Recorded herewith
	ASSIGNEE STATEMENT
Date _	Attached to this power is a "CERTIFICATE UNDER 37 CFR 3.73(b). Signature William A. Wise, Jr. Type or print name of person authorized to sign on behalf of assignee Corporate Counsel and Assistant Clerk Title
NOTE:	The assignee of the entire interest may revoke previous powers and be represented by an attorney of his or her selection. 37 CFR 1.36.
	(check the following time if it forms a part of this power of attorney)
[]	Added page - Authorization of attorney(s) to accept and follow instructions from representative. Page 2 of 2

APPL	ICANT	Bonm et al.
SERIA	AL NO	: 09/262,589
FILEI	D:	March 4, 1999
FOR:		SYNCHRONIZATION PULSE DETECTION CIRCUIT
(Name	of Assig	university, government agency, etc.)
	ue of eit	is the assignee of the entire right, title and interest in the patent application identified above ther:
A.	[X]	An assignment from the inventor(s) of the patent application identified above. The assignment recorded [] herewith in the Patent and Trademark Office.
OR		[X] in the Patent and Trademark Office on May 3, 1999, reel 9936, frame 0277.
B.	[]	A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:
	1.	From:To: The document was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
	2.	From: To: The document was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
	3.	From: To: The document is recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
	[]	Additional documents in the chain of title are listed on a supplemental sheet. Copies of assignments or other documents in the chain of title are attached.
identifi above.		ndersigned has reviewed all the documents in the chain of title of the patent application re and, to the best of undersigned's knowledge and belief, title is in the assignee identified

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

Page 1 of 2

statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date:

Title:

Name: William A. Wise, Jr.

Corporate Counsel and Assistant Clerk